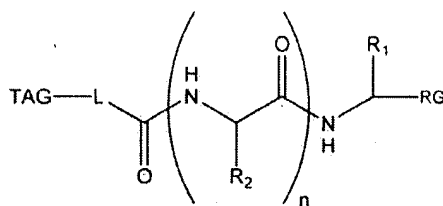


Amendments to the Claims/Listing of Claims

Please amend claim 22 and add new claims 31-36 as follows. In addition, please cancel claims 20, 21, 25 and 26 without prejudice. This listing of claims will replace all prior versions, and listings, of claims in the application.

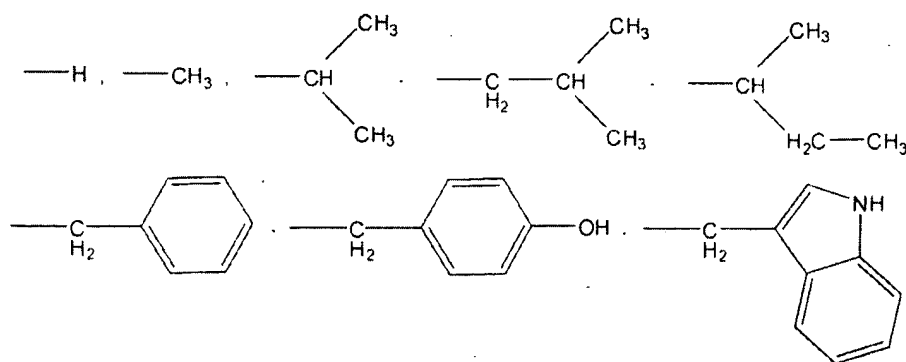
1. – 21. (Canceled)

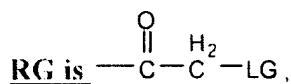
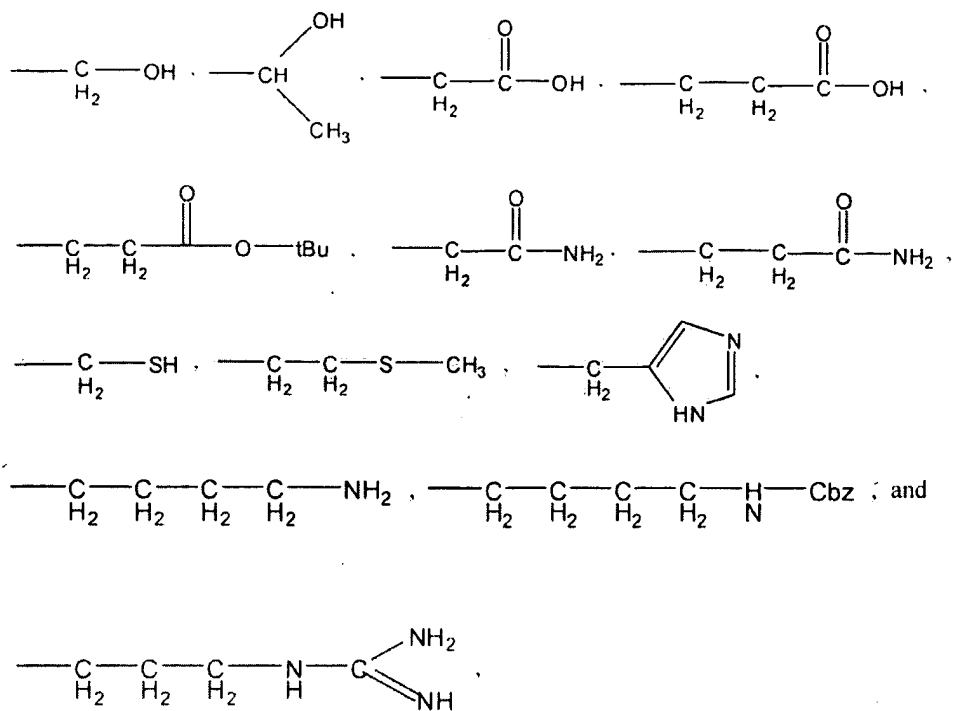
22. (Currently amended) An activity based probe ~~of claim 20~~ **(ABP) having the structure,**



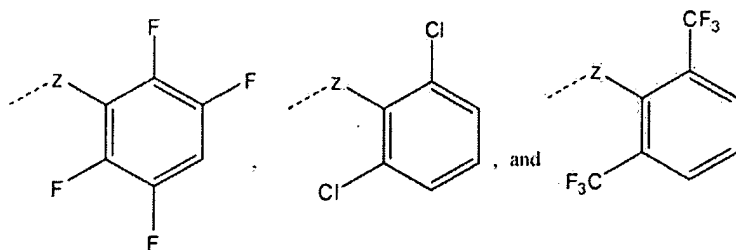
wherein

each R₁ and R₂ is independently selected from the group consisting of:





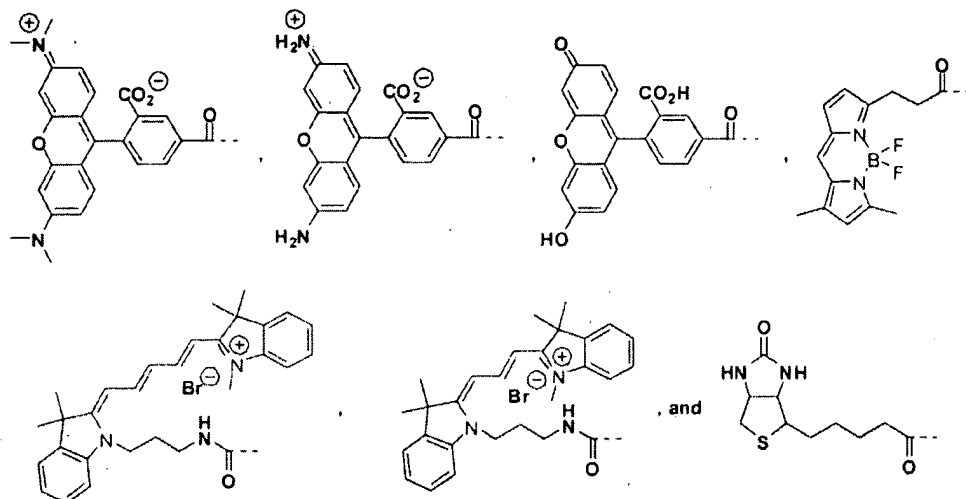
wherein LG is selected from the group consisting of:



wherein Z is -O- or -O-C(O)-;

L is optionally present and is an alkyl or heteroalkyl group of 1-20 backbone atoms selected from the group consisting of: -N(R)-, -O-, -S- or -C(R)(R)-, where each R is independently H or a -C₁₋₆ alkyl straight or branched chain;

TAG is ~~selected from the group consisting of:~~



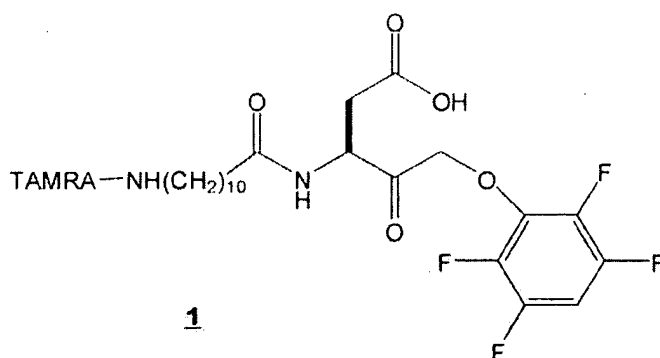
, or

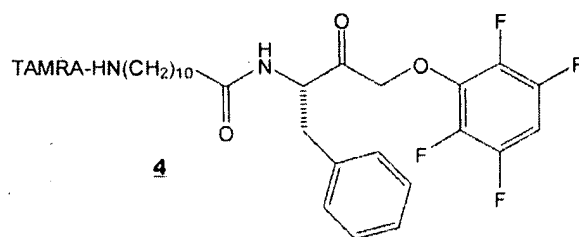
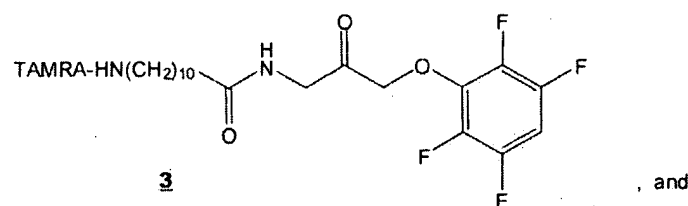
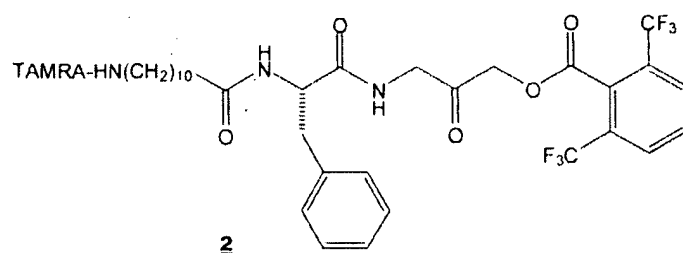
desthiobiotin, and

n is an integer from 0 to 4;

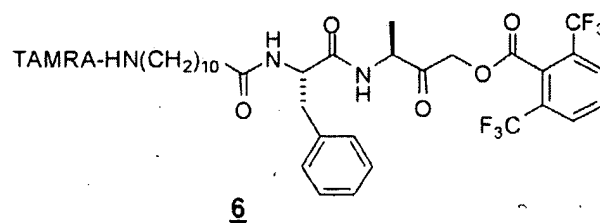
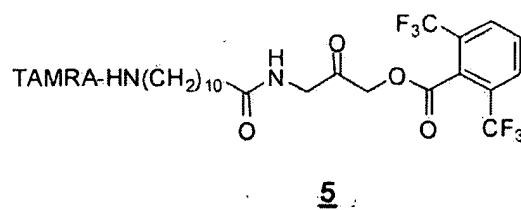
or a pharmaceutically acceptable salt or complex thereof.

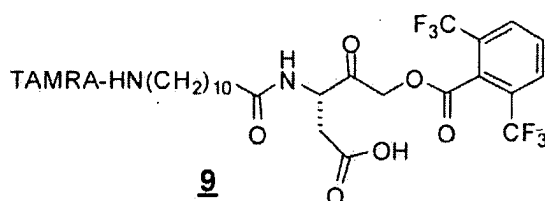
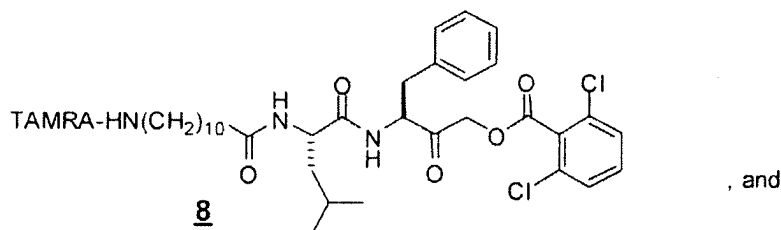
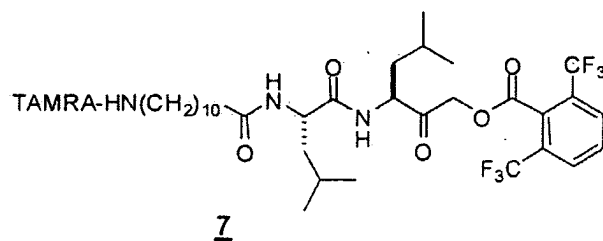
23. (Previously presented) An activity based probe having a structure selected from the group consisting of:





24. (Previously presented) An activity based probe having a structure selected from the group consisting of:





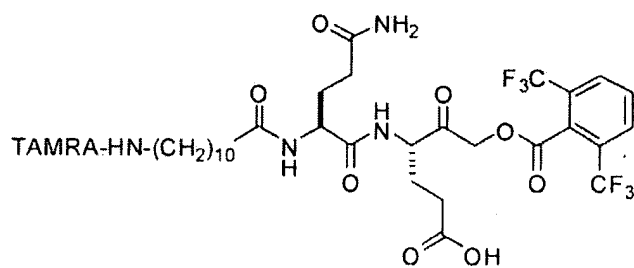
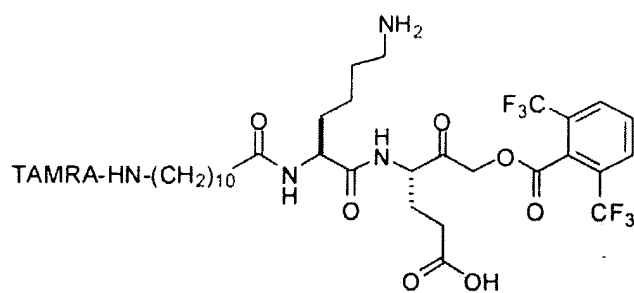
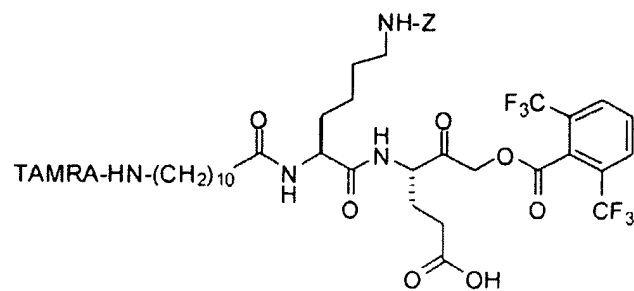
25. – 26. (Canceled)

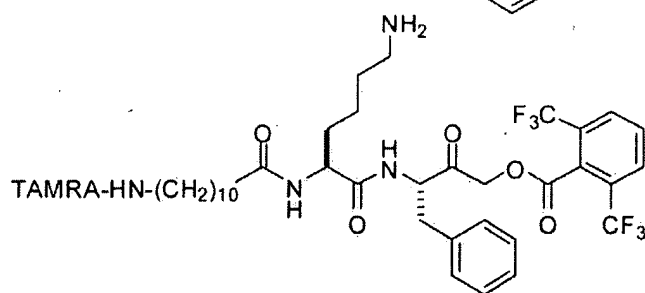
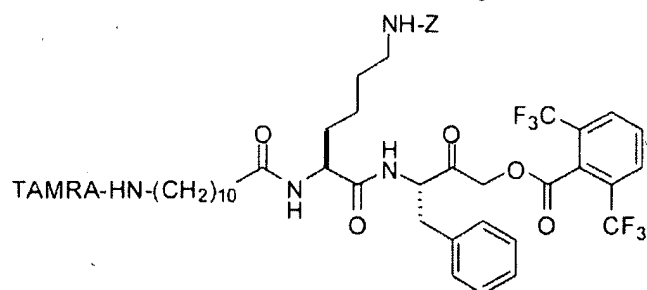
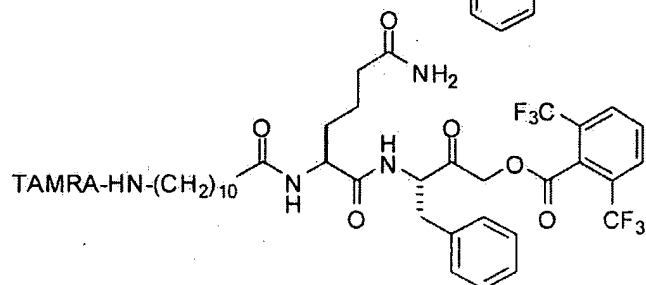
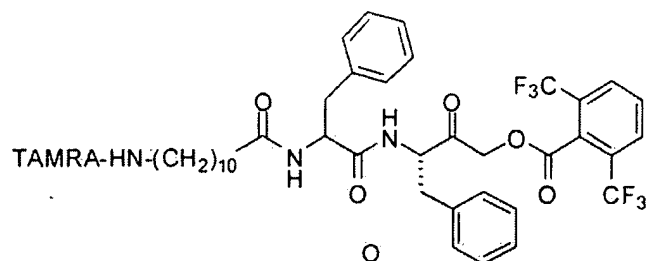
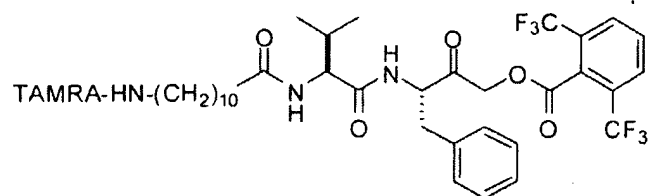
27. (Previously presented) An activity based probe library comprising a plurality of activity based probe(s) of claim 22.

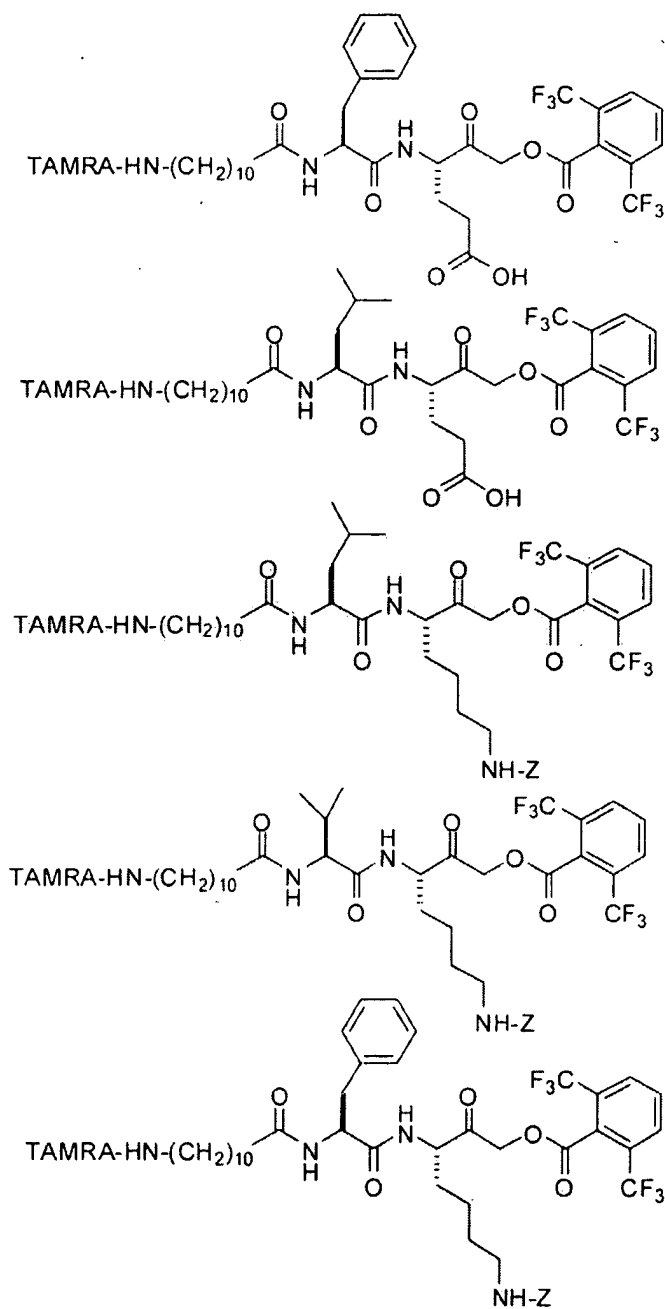
28. (Previously presented) An activity based probe library comprising a plurality of activity based probe(s) of claim 23.

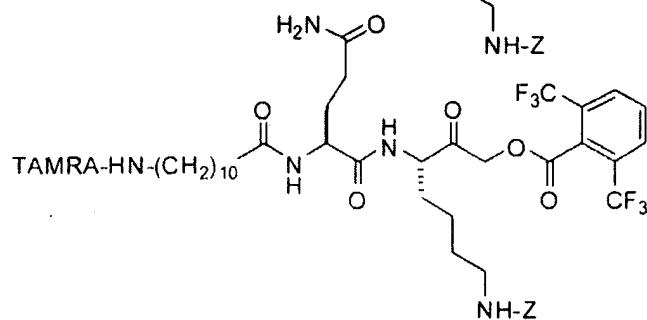
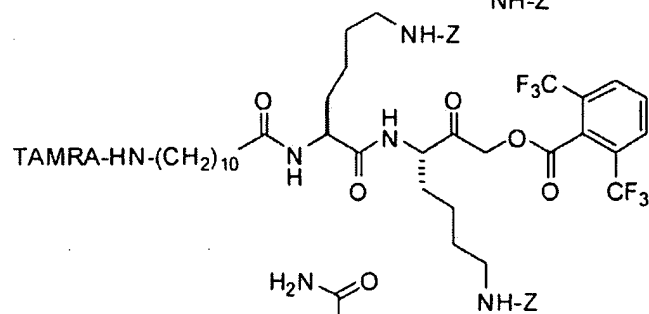
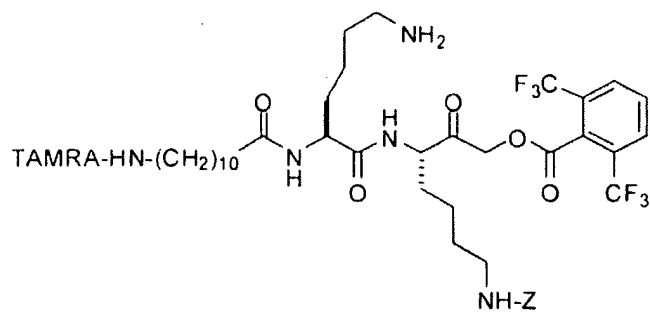
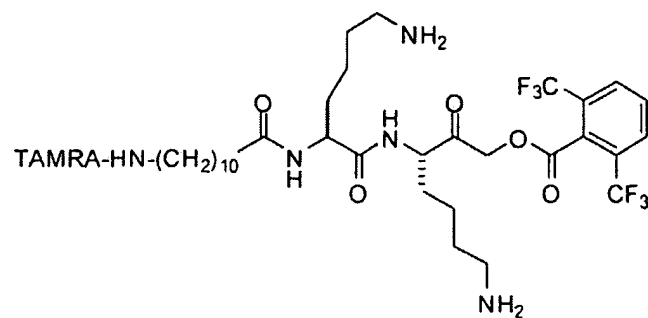
29. (Previously presented) An activity based probe library comprising a plurality of activity based probe(s) of claim 24.

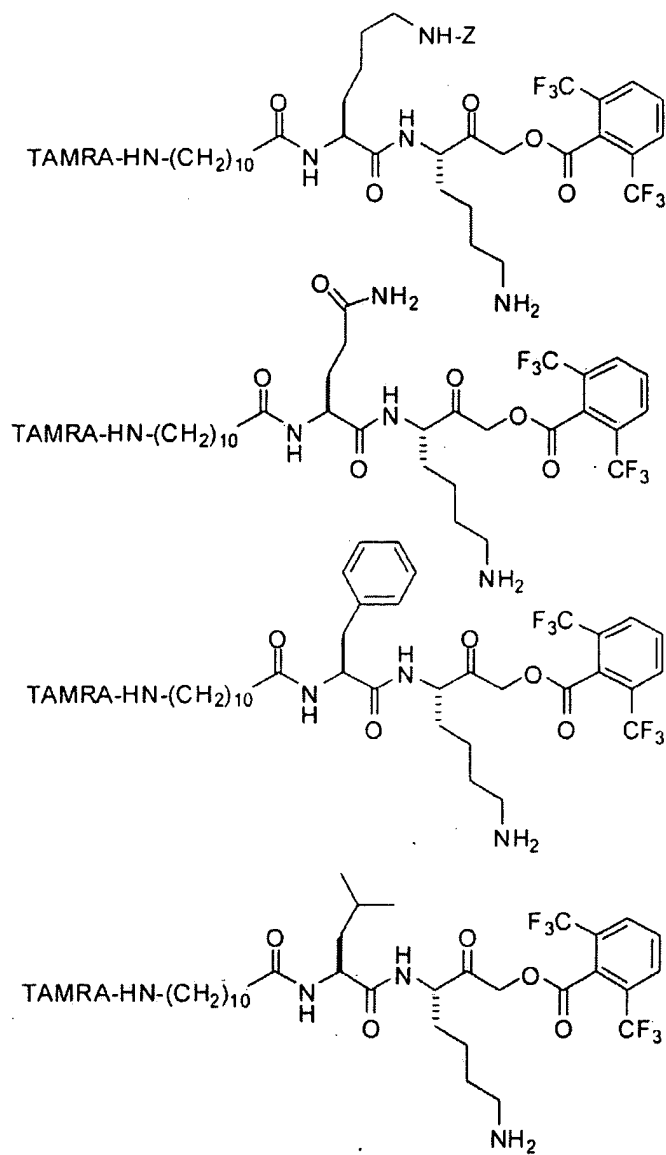
30. (Previously presented) An activity based probe having a structure selected from the group consisting of (wherein Z at each occurrence refers to $-\text{C}(\text{O})-\text{O}-\text{CH}_2\text{-phenyl}$):

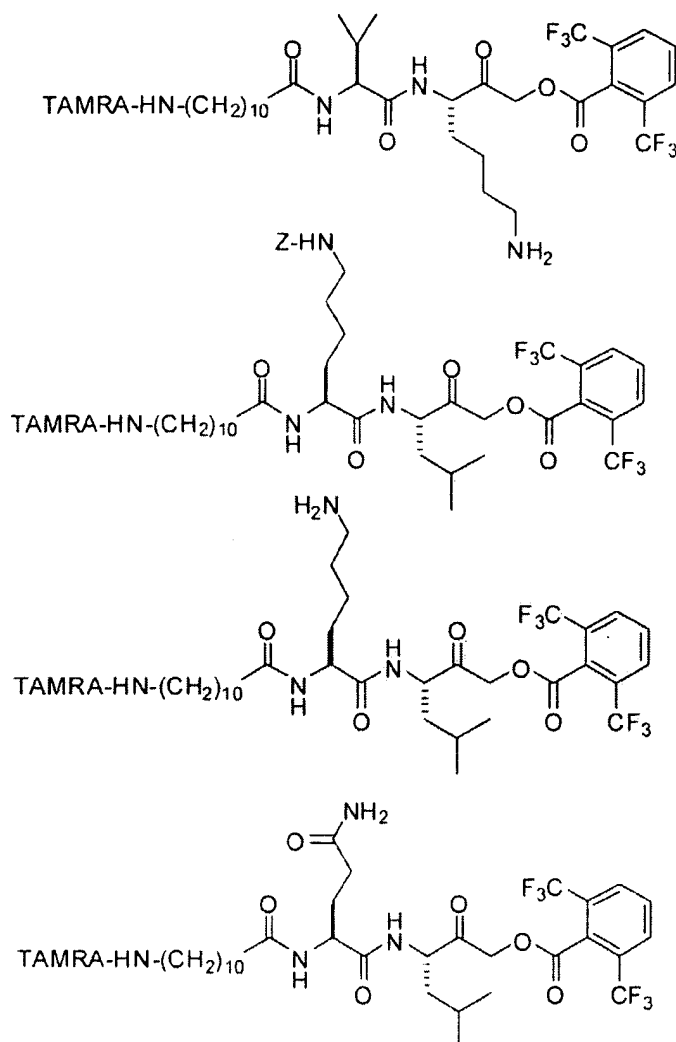


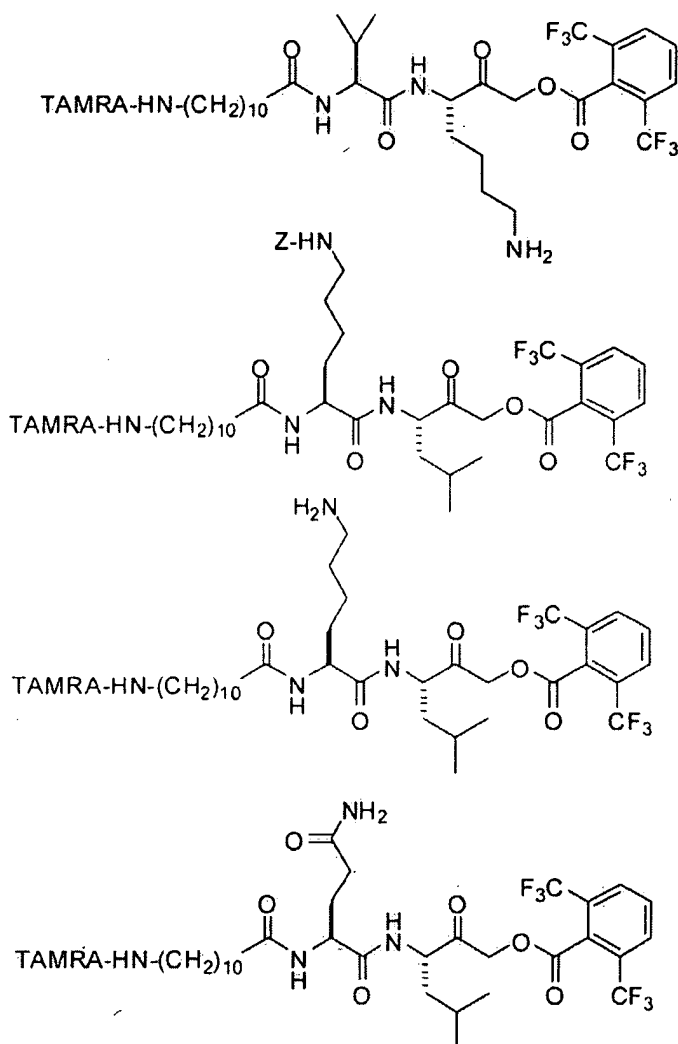


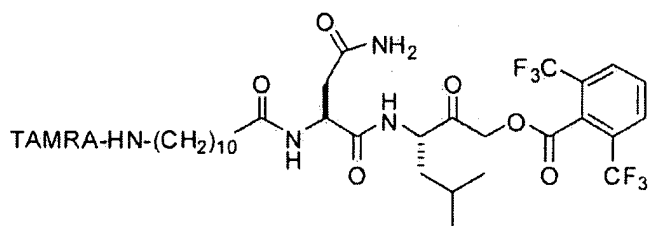
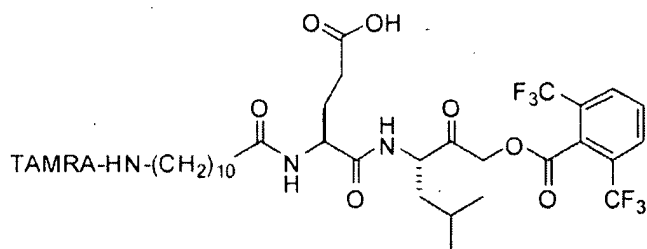
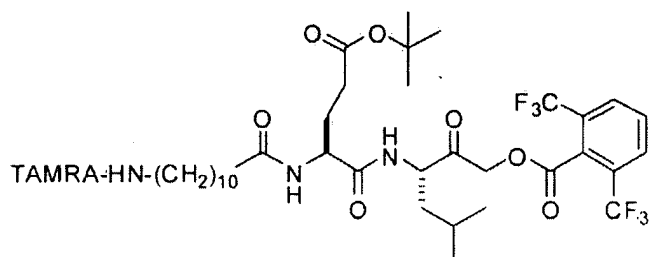
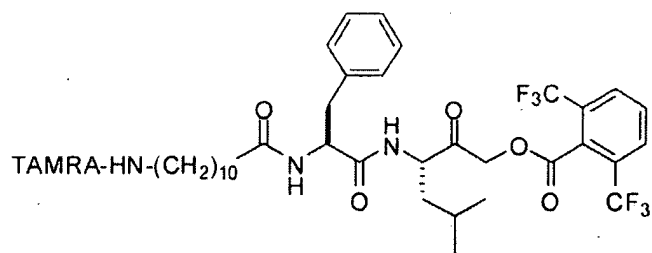


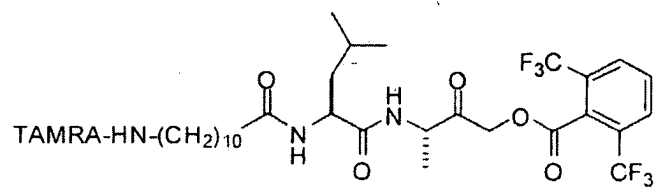
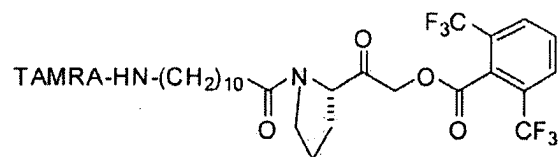
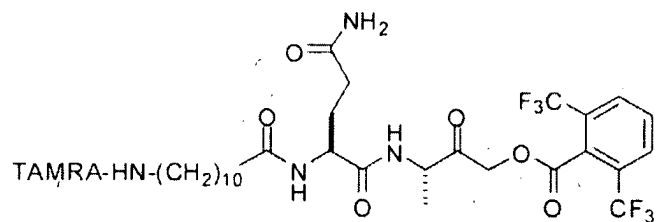
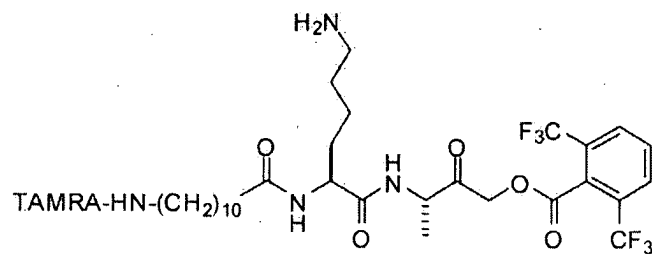
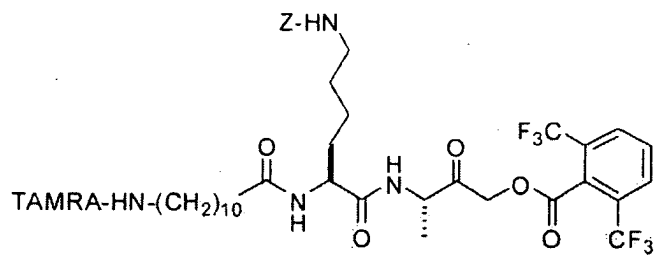


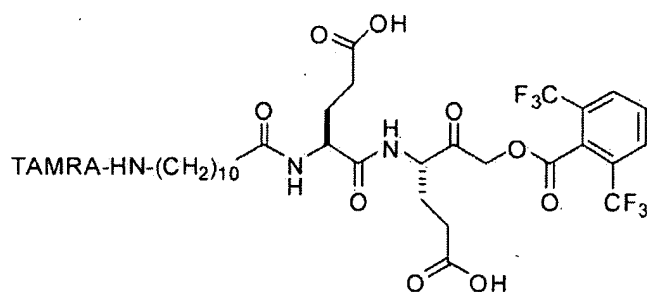
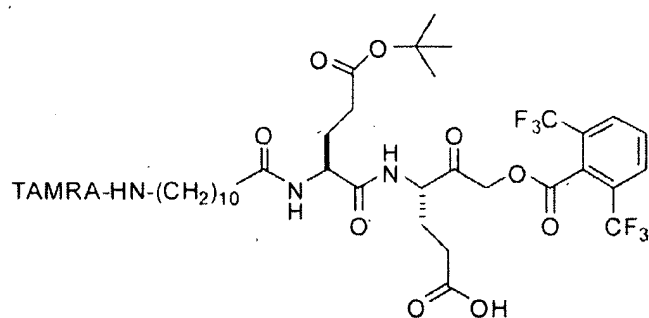
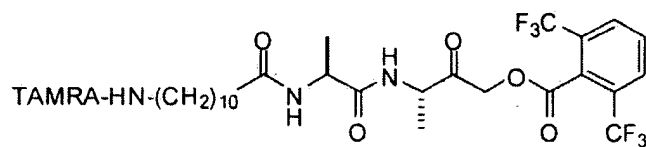
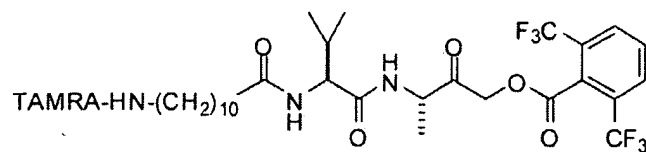




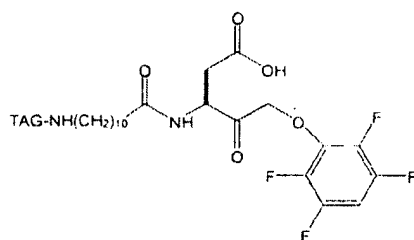


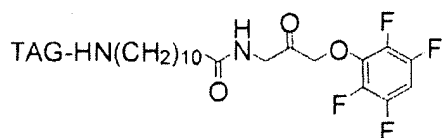
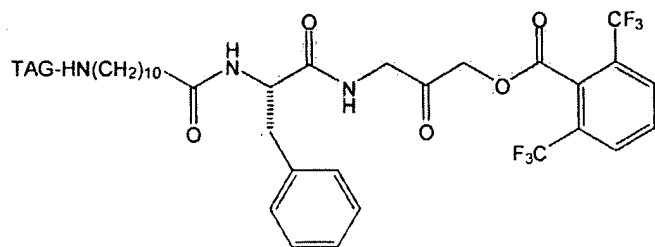




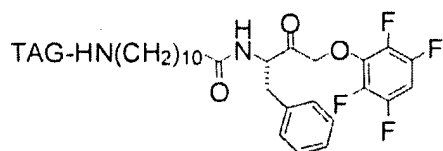


31. (New) An activity based probe according to claim 22 having a structure selected from the group consisting of:

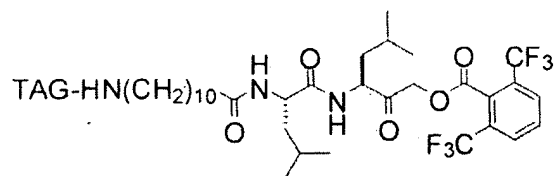
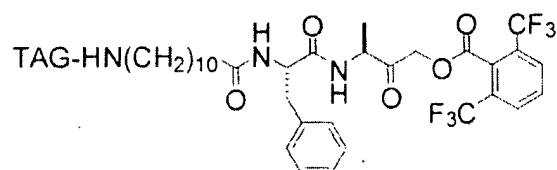
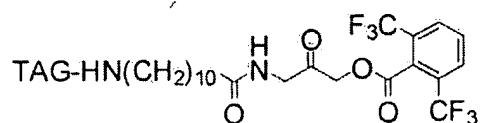


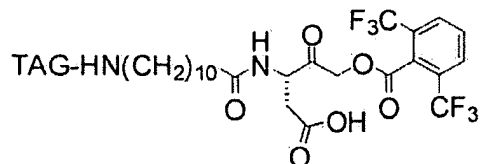
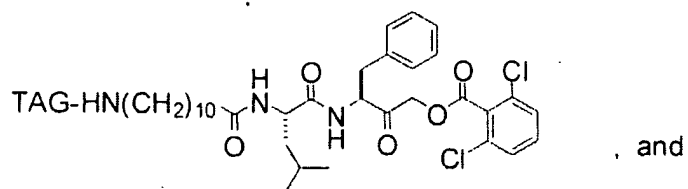


and

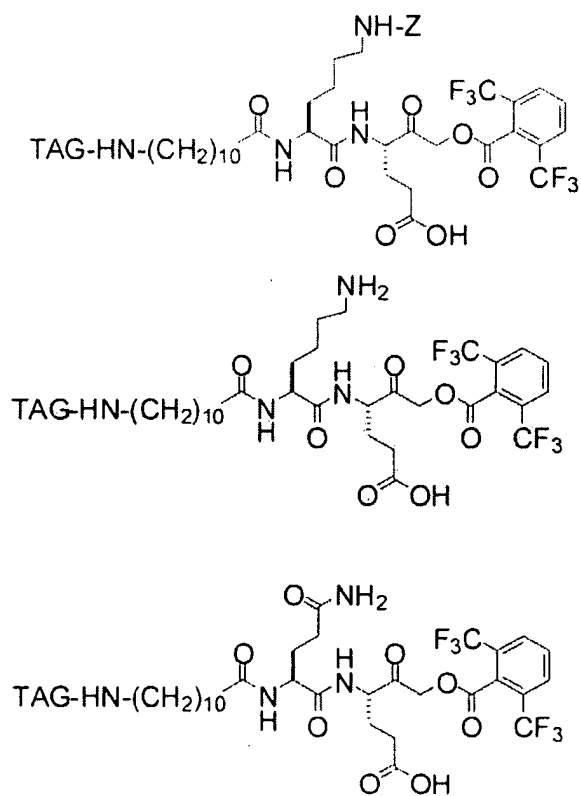


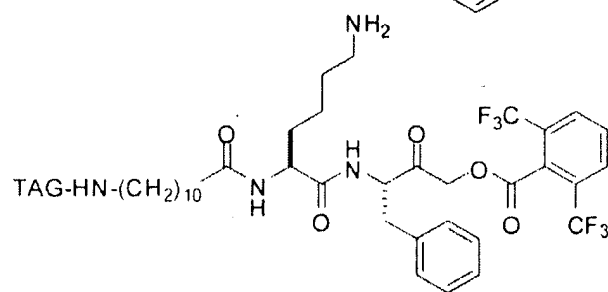
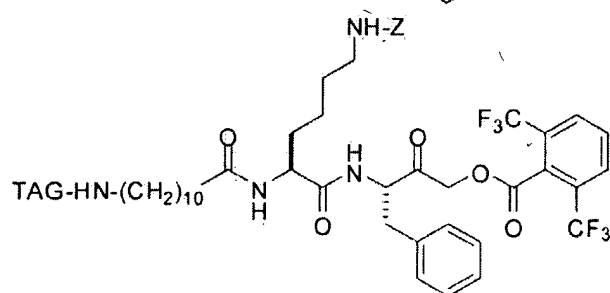
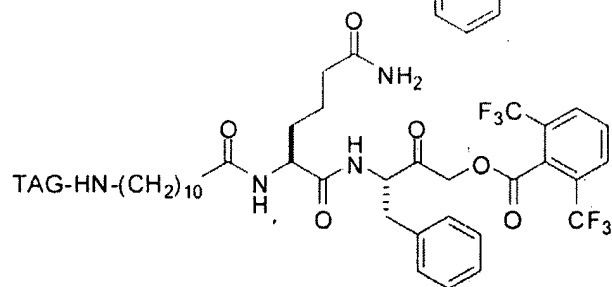
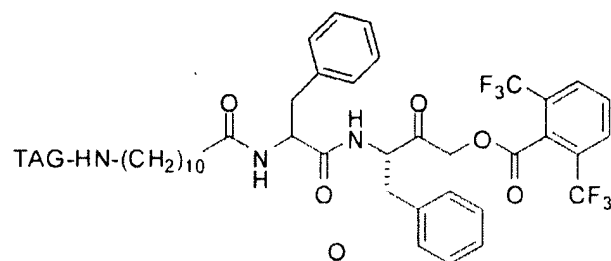
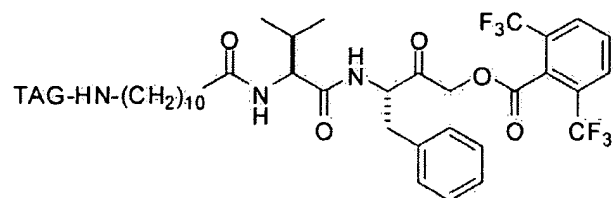
32. (New) An activity based probe according to claim 22 having a structure selected from the group consisting of:

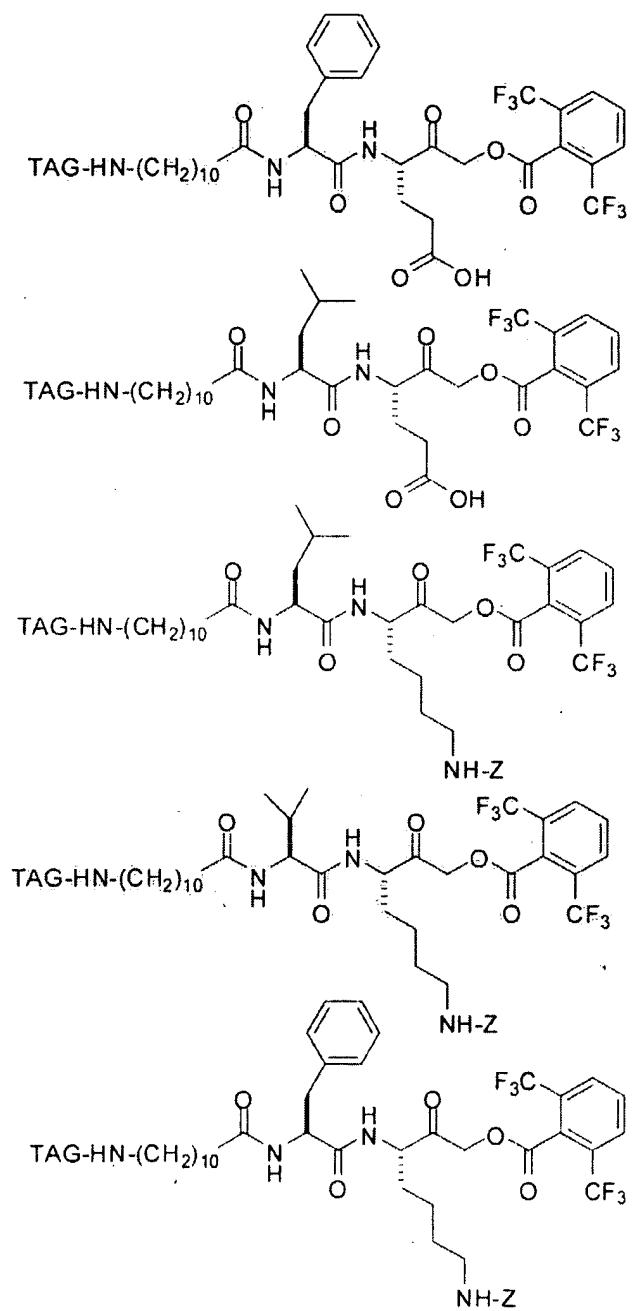


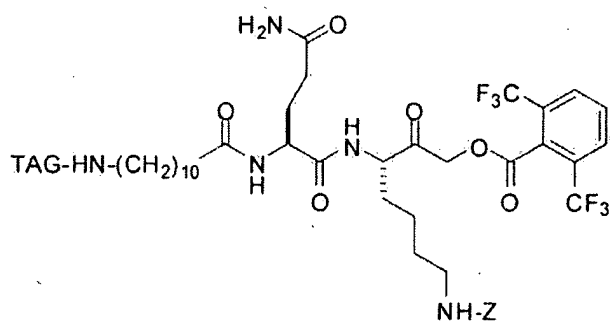
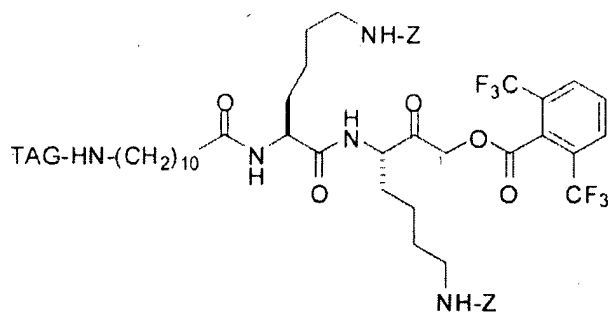
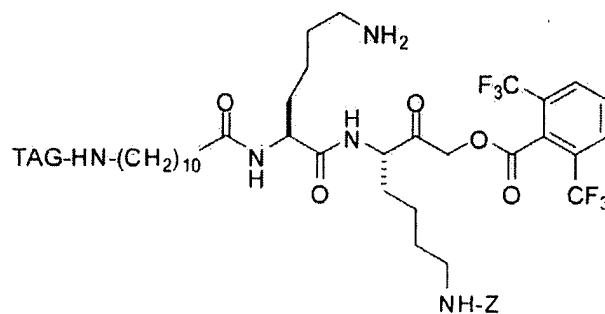
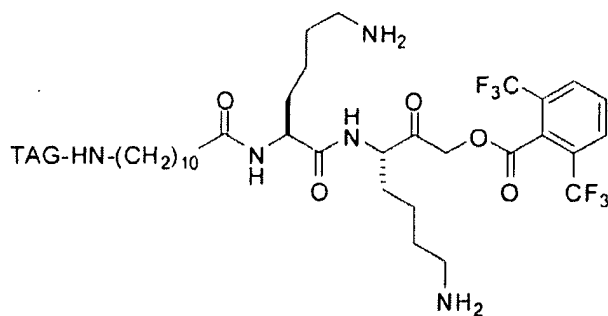


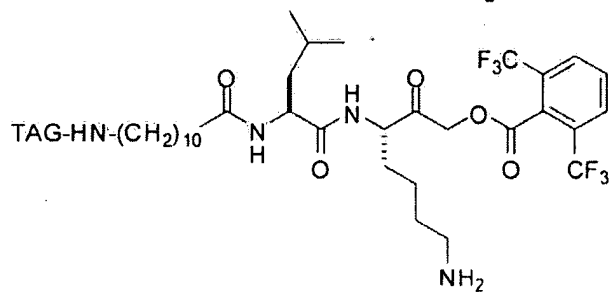
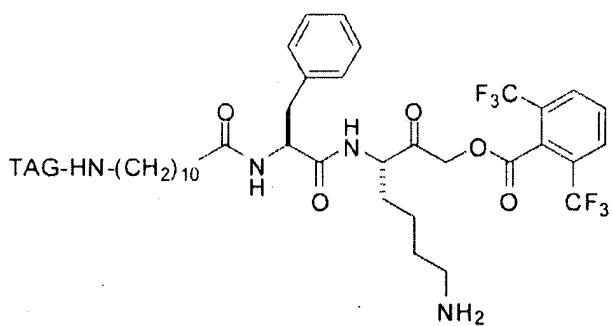
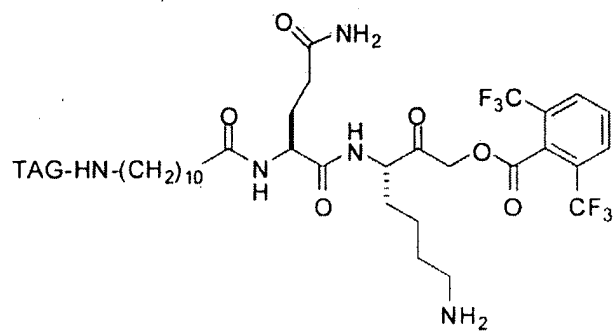
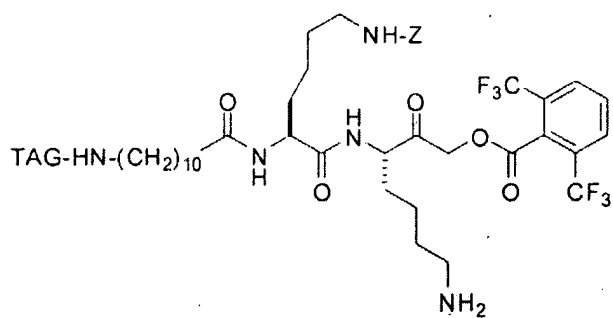
33. (New) An activity based probe according to claim 22 having a structure selected from the group consisting of:

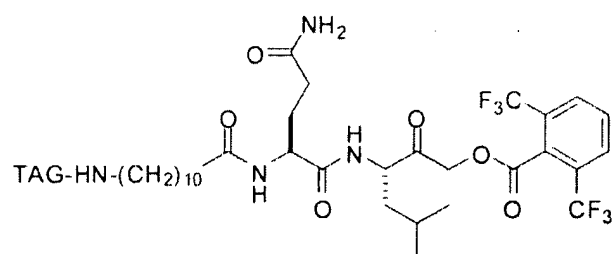
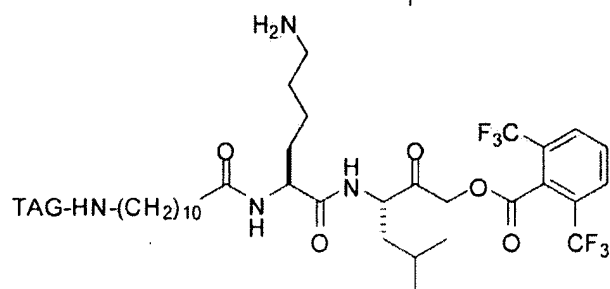
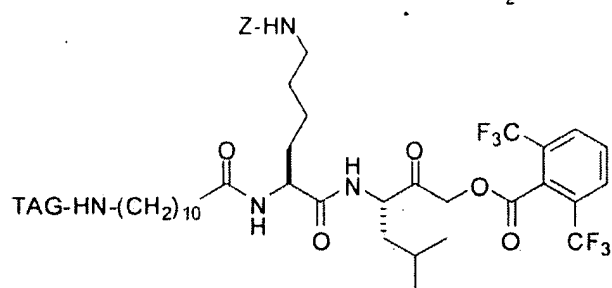
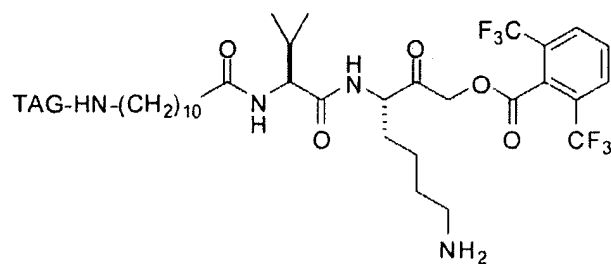


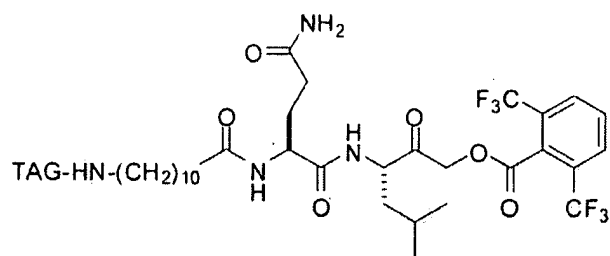
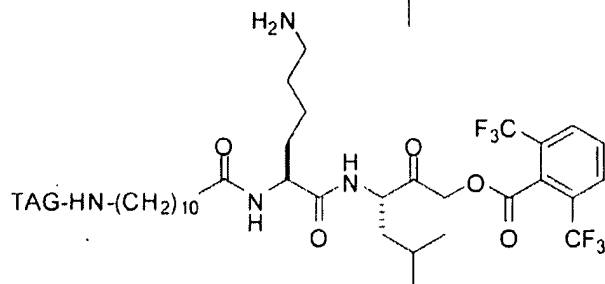
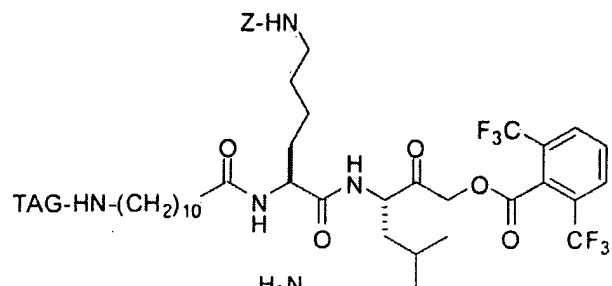
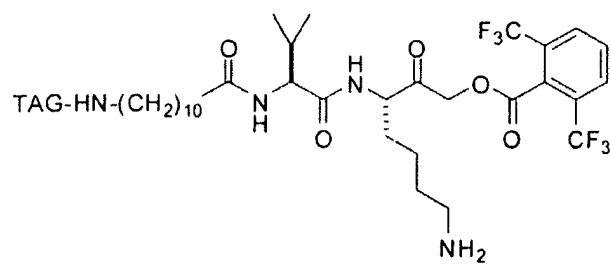


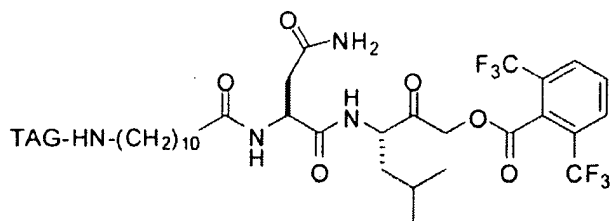
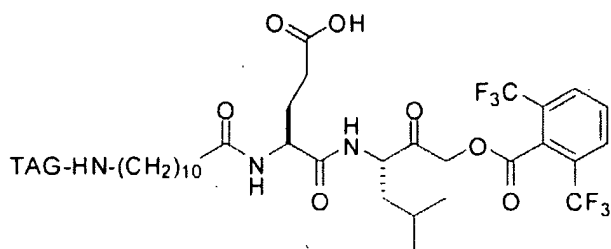
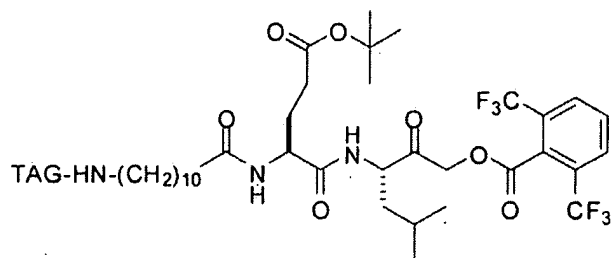
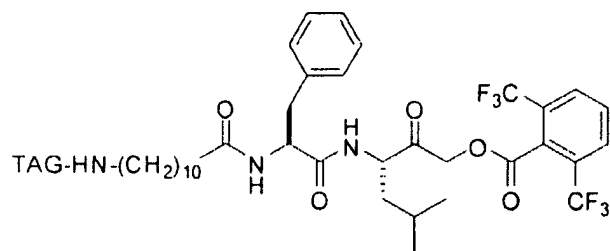


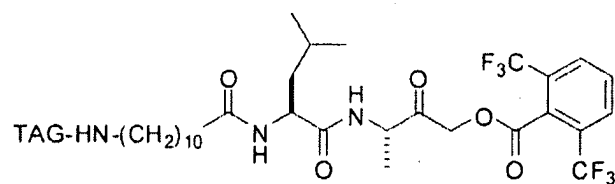
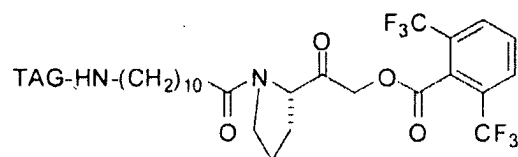
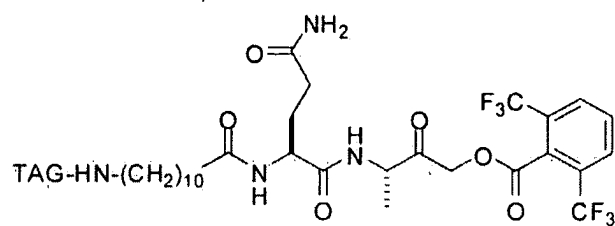
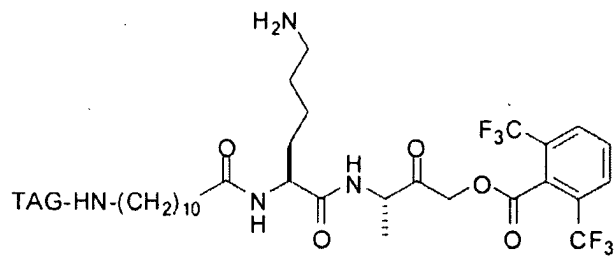
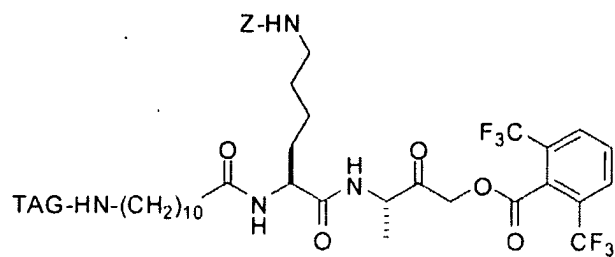


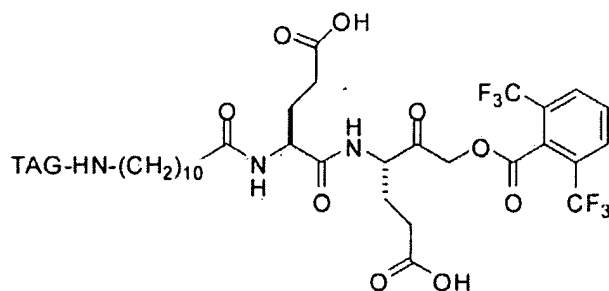
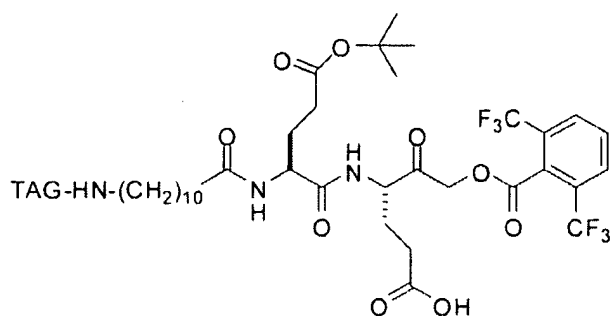
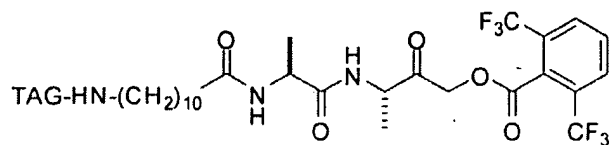
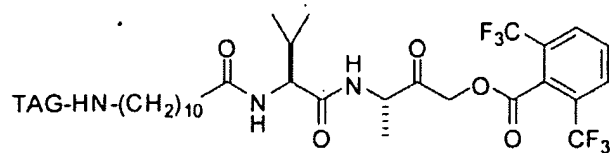












34. (New) An activity based probe library comprising a plurality of activity based probe(s) of claim 31.
35. (New) An activity based probe library comprising a plurality of activity based probe(s) of claim 32.
36. (New) An activity based probe library comprising a plurality of activity based probe(s) of claim 33.